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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

- 1. (currently amended) A method of converting a neural stem cell into a ventral neuron, which comprises introducing into the neural stem cell, ex vivo, a nucleic acid which expresses homeodomain transcription factor Nkx6.1 protein in the stem cell so as to thereby convert the neural stem cell into the ventral neuron.
- 2. (previously presented) The method of claim 1, wherein the nucleic acid introduced into the neural stem cell incorporates into the chromosomal DNA of the stem cell.
- (original) The method of claim 1 wherein the nucleic acid is introduced by transfection or transduction.
- 4. (original) The method of claim 1 wherein the ventral neuron is a motor neuron, a V2 neuron, or a V3 neuron.
- 5-12. (canceled)